DOCUMENT RESUME

ED 182 650 CS 005 241

AUTHOR Brown, Rexford: Bowditch, Deborah
TITLE Adult Readers: Will They Need Basics Too?
INSTITUTION Education Commission of the States, Denver, Colo. National Assessment of Educational Progress.
PUB DATE Oct 79
NOTE 17p.
AVAILABLE FROM National Assessment of Educational Progress, Education Commission of the States, Suite 700, 1860 Lincoln St., Denver, CO 80295 ($1.00)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Literacy: Adults: *Educational Assessment: *Functional Illiteracy: Functional Reading: Multiple Choice Tests: *Reading Comprehension: Reading Difficulty: *Reading Research: Reading Skills: Reading Tests: *Trend Analysis
IDENTIFIERS *National Assessment of Educational Progress

ABSTRACT

Results of a 1977 assessment of the reading abilities of approximately 1,250 adults (26 to 35 years old) are reported in this paper and are compared with results of a similar assessment made in 1971. After discussing a typical comprehension exercise used in the assessment, the paper presents the materials and multiple choice questions used in assessing respondents' comprehension of four types of practical materials: a classified advertisement, an advertisement from a national magazine, a parking ticket, and a life insurance form. It then presents four exercises involving materials of a more difficult nature: two expository passages, a poem, and a graph. For each of the eight exercises, the paper indicates the percentage of adults responding to each answer and notes changes in those percentages from 1971. Among the major conclusions reported are that there was apparently little change in overall reading ability between 1971 and 1977, that a great many adults may still have difficulty reading passages that call for higher-level comprehension skills (for instance, key percentages of success on six questions with medium- to high-difficulty passages ranged from only 18% to 60%), and that amount of time spent watching television and amount of time spent reading appear to relate to reading performance. (GT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED182690

ADULT READERS

Will They Need Basics Too?

A paper by

Rexford Brown
Director, Dept. of Publications and User Products, NAEP

Deborah Bowditch
Free-lance Writer, Denver

October 1979

National Assessment of Educational Progress
Administered by the
Education Commission of the States
Suite 700, 1860 Lincoln Street
Denver, Colorado 80295

CS005241

ADULT READERS:

WILL THEY NEED BASICS TOO?

by
Deborah Bowditch
Rexford Brown

The catchphrase for education in this decade has been "back to the basics." An epidemic of reports on the decline of children's school achievements in the early and mid-1970s, compounded by a drop in college entrance exam scores, prompted a public cry for renewed emphasis on the three Rs, especially reading. The clamor came, naturally, from adults, whose concern was for the reading skills of elementary school students and teenagers.

But what about the adults themselves? Even more helpless than the student who cannot read his lesson is the functionally illiterate adult who cannot decipher the want ads or understand written instructions. The development of a child's reading skill is, after all, preparation for his needs as an adult. It is important, then, to periodically assess the reading skills of adults and determine to what extent changes in the skills of school-age youngsters have an impact, later on, upon them as adults.

The National Assessment of Educational Progress (NAEP) assessed adult readers (26-35 years old) in 1970-71 and found that, in most respects, their skills were on a par with 17-year-olds. In some cases, more teenagers than adults were able to answer questions correctly; but in most cases, the adults performed at or slightly above the teenagers' levels (Reading: Released Exercises, 1973). Both groups had greater success reading relatively easy, low-inference material than they did reading material that called for higher-level reading skills (Mellon, 1975).

Have adult readers improved their skills since that time? Or has the apparent erosion of school-age youngsters' skills had a domino effect that carried beyond the school walls, out into the marketplace? In order to find out, National Assessment again conducted a probe of adult reading skills in 1977. Unfortunately, this second effort was not nearly as comprehensive as the first.[1] Nevertheless, the probe did employ items used in the first assess-

[1]The 1977 probe consisted of 34 multiple-choice questions about 18 passages. Approximately 1,290 adults responded to each question. The 1971 assessment consisted of 97 questions about 53 passages. Approximately 1,250 adults responded to each of those questions.

MAR 0 4 1980

ment and did involve a sufficient number of people for National Assessment to hazard some generalizations.

First, there has apparently been little change in overall reading ability between 1970 and 1977. Of the 34 exercises assessed, 25 showed no significant change in percentages of people who answered questions correctly. Of the remaining 9, 6 showed significant declines and 3 showed significant improvements.[2]

Second, it appears that a great many adults may still have difficulty reading passages that call for higher-level comprehension skills. For instance, key percentages of success on six questions with medium-to-high difficulty passages ranged from only 18% to 60%. In addition, five of the six key percentages had declined since 1971. Although only one of them was statistically significant (-11%), the overall trend may be cause for worry.

Third, income, amount of time spent watching television and amount of time spent reading appear to relate to reading performance. Because questions about income, television watching and reading frequency were not asked in the 1971 survey, National Assessment cannot report any changes; however, the 1977 survey revealed that, as a group, people with annual incomes below $8,000 per year consistently performed below the national level, while those with incomes of $15,000 or more performed above it.

In order to flesh out these more general results, this paper will present some representative exercises by first discussing a typical comprehension exercise, then some practical or "functional" reading tasks, and finally some of the more difficult materials.

Performance on a Relatively Simple Passage

One comprehension exercise required respondents to read a 1,000-word Reader's Digest article on prevention of mosquito bites and then answer five multiple-choice questions. The amount of time required to read the article was recorded for additional information. (Sixty percent of the respondents read the passage in six minutes or less; 42% read it in five minutes or less; 19% read it in four minutes or less.)

Although percentages of correct answers were relatively high on each of the five questions, the overall percentage of people who answered all five questions correctly was only 34% and had not changed appreciably since 1971. Two-thirds of the readers, however, correctly answered four of the five questions.

---

[2]Significant means statistically significant at the .05 level. In other words, National Assessment is confident that the differences would not arise by chance alone in at least 95% of all the possible samples one could draw to test these populations.

Reader's Digest articles are aimed at the widest possible audience and are typically edited to be readable for anyone with a grammar school education. National Assessment results suggest that a majority of 26-35-year-old adults read such articles at about 165-170 words per minute and most are able to answer significant questions about the passage. A considerable number, however -- perhaps as much as a third of the population -- may have difficulty reading such articles. Only a third of the population seems capable of answering all the questions asked -- not very encouraging when one considers that the questions were quite simple.

Performance on Practical Reading Tasks

Performance on practical tasks varied. For instance, on the following item almost nine-tenths of the adults answered all three questions correctly.

Read the classified advertisement below and answer the questions on the next page. You may look back to this page if you wish.

Be a

TAA

Flight Hostess

Now TAA is Hiring 100 Hostesses Weekly!

AND – TAA OFFERS YOU IMMEDIATE HIRING! SEE YOUR TAA FLIGHT HOSTESS REPRESENTATIVE AT THE PLACES AND TIMES LISTED BELOW.

You will enjoy:

- Free schooling—with training salary of $61 weekly.
- Salary after 6 weeks schooling up to $525 monthly.
- Flights within U.S.A. or to Europe.
- Training in major European languages—free.
- Travel pass privileges for parents after 6 months.
- A wide range of fringe benefits.

Primary Qualifications

Minimum age 19½. High School Graduate; Excellent health; Unblemished complexion. Height 5'2"—5'9" with proportionate weight by TAA standard. Glasses permitted.

APPLY IN PERSON

Mrs. Molly Wabash
Smith Hotel - San Francisco
Tuesday and Saturday
April 9th and 13th
9:00 - 1:00 p.m.

TRANS ATLANTIC AIRLINES

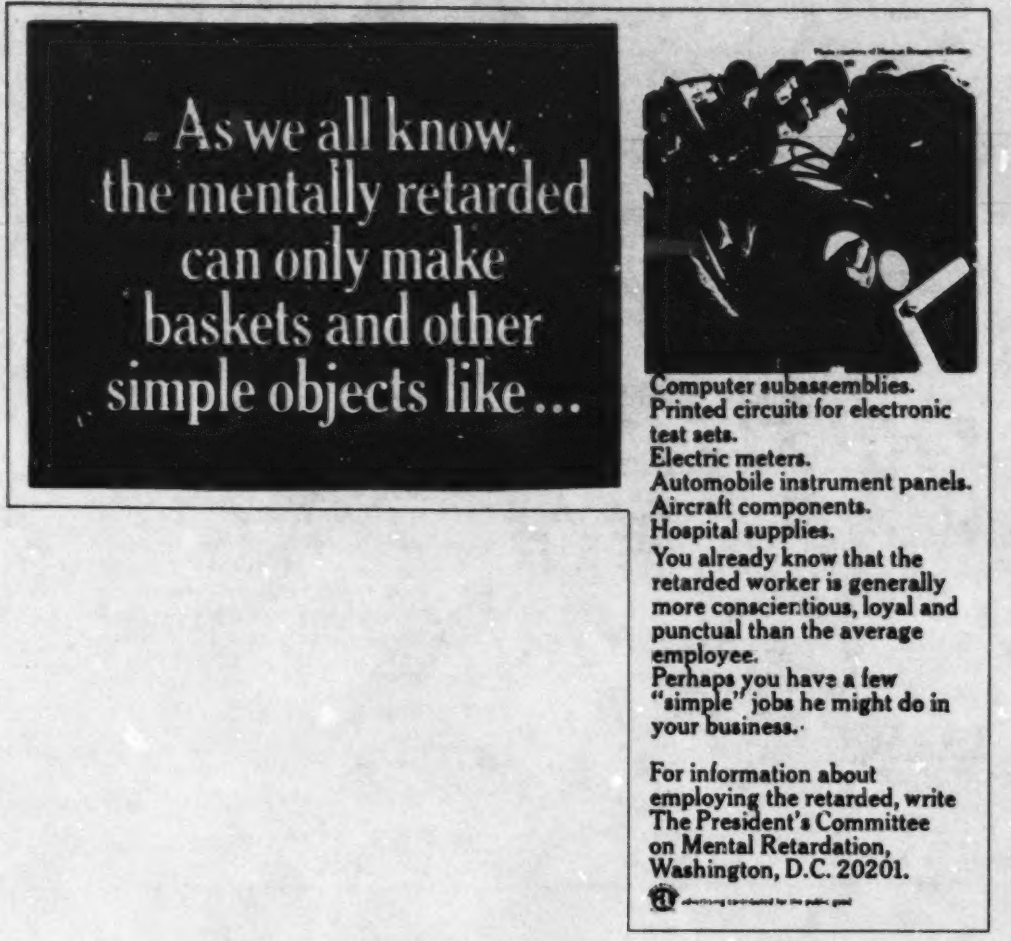
An Equal Opportunity Employer

	1977 Percent Responding	Change From 1971
A. What is the top salary offered after six weeks of training?		
○ $475.00 a month	1	0
○ $500.00 a month	1	0
● $525.00 a month	97	0
○ $550.00 a month	1	0
○ I don't know.	1	0
No response	0†	-1*
B. If you live in San Francisco, how would you apply for the job?		
○ Send a telegram to TAA.	1	-1
● Visit Mrs. Molly Wabash personally.	91	4*
○ Call Mrs. Molly Wabash on the phone.	2	0
○ Write a letter of application to Mrs. Molly Wabash.	4	-2
○ I don't know.	2	1
No response	0	-1*
C. What do the words "Equal Opportunity Employer" mean?		
○ TAA will get you a job.	2	1*
○ All applicants will get the job.	1	0
○ You can get any job you want at TAA.	1	-0
● All qualified applicants have an equal chance to get the job.	95	-2
○ I don't know.	1	1
No response	1†	-1

**Statistically significant.*
†Figures do not total 100% because of rounding.

Percentages were almost as high on the exercise following, although the percentage dropped about 3 points from 1971:

Here is an ad from a national magazine. Read it and complete the sentence on the opposite page.

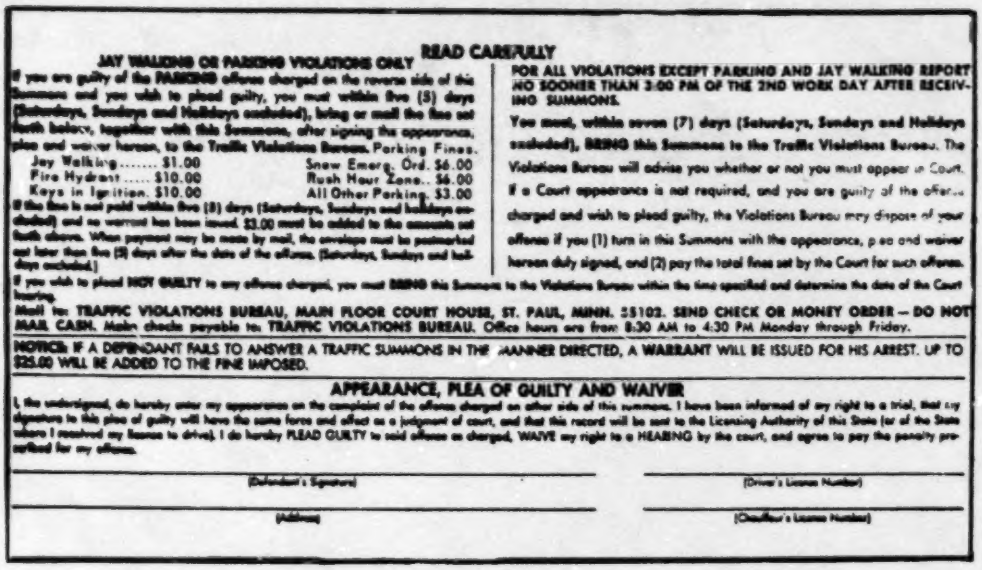

As we all know, the mentally retarded can only make baskets and other simple objects like...
Computer subassemblies.
Printed circuits for electronic test sets.
Electric meters.
Automobile instrument panels.
Aircraft components.
Hospital supplies.
You already know that the retarded worker is generally more conscientious, loyal and punctual than the average employee.
Perhaps you have a few "simple" jobs he might do in your business.
For information about employing the retarded, write The President's Committee on Mental Retardation, Washington, D.C. 20201.

	1977 Percent Responding	Change From 1971
The purpose of this advertisement is to		
● encourage industry to employ mentally retarded people.	83	-3
○ show how mental retardation can be reduced in the population.	2	0
○ indicate that mentally retarded workers are superior to other workers.	3	-2
○ show the general public that mentally retarded people can make simple things.	9	3*
○ I don't know.	3	2
No response	0	-1

**Statistically significant.*

The number of adults with incomes less than $8,000 who picked the correct response was almost 11 points below the national level; those with incomes of $15,000 or more were 10 points above; more than three hours of television watching, 11 below; no reading for pleasure, 31 points below.

The parking ticket exercise following apparently caused problems for a third of the adults. It, too, revealed a decline in the percentage of people able to answer questions correctly.



READ CAREFULLY

JAY WALKING OR PARKING VIOLATIONS ONLY

If you are guilty of the PARKING offense charged on the reverse side of this Summons and you wish to plead guilty, you must within five (5) days (Saturdays, Sundays and Holidays excluded), bring or mail the fine set forth below, together with this Summons, after signing the appearance, plea and waiver hereon, to the Traffic Violations Bureau. Parking Fines.

Jay Walking..... $1.00	Snow Emerg. Ord. $6.00
Fire Hydrant $10.00	Rush Hour Zone.. $6.00
Keys in Ignition. $10.00	All Other Parking. $3.00

If the fine is not paid within five (5) days (Saturdays, Sundays and holidays excluded) and no warrant has been issued, $3.00 must be added to the amounts set forth above. When payment may be made by mail, the envelope must be postmarked not later than five (5) days after the date of the offense. (Saturdays, Sundays and holidays excluded.)

FOR ALL VIOLATIONS EXCEPT PARKING AND JAY WALKING REPORT NO SOONER THAN 3:00 PM OF THE 2ND WORK DAY AFTER RECEIVING SUMMONS.

You must, within seven (7) days (Saturdays, Sundays and Holidays excluded), **BRING** this Summons to the Traffic Violations Bureau. The Violations Bureau will advise you whether or not you must appear in Court. If a Court appearance is not required, and you are guilty of the offense charged and wish to plead guilty, the Violations Bureau may dispose of your offense if you (1) turn in this Summons with the appearance, plea and waiver hereon duly signed, and (2) pay the total fines set by the Court for such offense.

If you wish to plead **NOT GUILTY** to any offense charged, you must **BRING** this Summons to the Violations Bureau within the time specified and determine the date of the Court hearing.

Mail to: TRAFFIC VIOLATIONS BUREAU, MAIN FLOOR COURT HOUSE, ST. PAUL, MINN. 55102. SEND CHECK OR MONEY ORDER -- DO NOT MAIL CASH. Make checks payable to: TRAFFIC VIOLATIONS BUREAU. Office hours are from 8:30 AM to 4:30 PM Monday through Friday.

NOTICE: IF A DEFENDANT FAILS TO ANSWER A TRAFFIC SUMMONS IN THE MANNER DIRECTED, A WARRANT WILL BE ISSUED FOR HIS ARREST. UP TO $25.00 WILL BE ADDED TO THE FINE IMPOSED.

APPEARANCE, PLEA OF GUILTY AND WAIVER

I, the undersigned, do hereby enter my appearance on the complaint of the offense charged on other side of this summons. I have been informed of my right to a trial, that my signature to this plea of guilty will have the same force and effect as a judgment of court, and that this record will be sent to the Licensing Authority of this State (or of the State where I received my license to drive). I do hereby PLEAD GUILTY to said offense as charged, WAIVE my right to a HEARING by the court, and agree to pay the penalty prescribed for my offense.

(Defendant's Signature) (Driver's License Number)

(Address) (Chauffeur's License Number)

	1977 Percent Responding	Change From 1971
A. Must a person appear at the Traffic Violation Bureau to plead "Not Guilty" to a traffic offense?		
● Yes	79	-4*
○ No	20	5*
○ I don't know.	1	0
No response	0	-1*

	1977 Percent Responding	Change From 1971
B. If a person received this ticket for parking two hours in a one-hour zone, his fine would be		
○ $ 1.00.	5	3*
● $ 3.00.	80	-4
○ $ 6.00.	8	-1
○ $10.00.	2	0
○ I don't know.	4	3*
No response	0†	-1*

**Statistically significant.*
†Figures do not total 100% because of rounding.

Sixty-six percent of the respondents answered both questions correctly, a significant drop of 6 percentage points. The percentage of adults who responded correctly to both questions and whose annual income was $15,000 or more was 7 points above the national level; those who watch three or more hours of television a day were 8 points below; those who do no reading for pleasure, 18 points below.

Finally, a majority of the adults failed to answer correctly two questions about the life insurance form below.

---

4 The insurance afforded is only with respect to such of the following coverages as are indicated by specific premium charge or charges. The limit of the company's liability against each such coverage shall be as stated herein, subject to all the terms of this policy having reference thereto.

A. BODILY INJURY LIABILITY		B. PROPERTY DAMAGE LIABILITY	C. MEDICAL PAYMENTS	D. (1) COMPREHENSIVE EXCLUDING COLLISION (2) PERSONAL EFFECTS	E. COLLISION	J. UNINSURED MOTORISTS		COVERAGES
THOUSAND EACH PERSON	THOUSAND EACH OCCURRENCE	THOUSAND EACH OCCURRENCE	EACH PERSON	(1) ACTUAL CASH VALUE (2) $100	ACTUAL CASH VALUE LESS	THOUSAND EACH PERSON	THOUSAND EACH ACCIDENT	LIMITS OF LIABILITY
								TOTAL PREMIUM
$25	$50	$10	$1000		$100 DEDUCTIBLE	$10	$20	
$37.80		$25.00	$9.00	$20.50	$45.10	$6.00		$143.40

	1977 Percent Responding	Change From 1971
A. What is the maximum amount for which this policy covers medical bills?		
● $ 1,000	86	-4*
○ $ 5,000	1	0
○ $10,000	3	1
○ $25,000	4	2*
○ I don't know.	6	2
No response	0	-1
B. What is the maximum amount this policy would pay in case you injured another person in an automobile accident?		
○ $ 25	14	-6*
○ $ 3,000	27	-2
○ $ 5,000	3	1
● $25,000	46	6*
○ I don't know.	8	2
No response	0†	-1

**Statistically significant.*
†Figures do not total 100% because of rounding.

There was a significant drop from 1971 to 1977 in the number who correctly identified the maximum medical bill amount and a significant increase in the correct response to the question about the maximum amount allowed for another person's injury. Overall, only 40% answered both questions correctly in 1977. Among women, that percentage was 34%. Although this is below the national level, it nevertheless represents a significant increase of 6 points.

Although results on these practical tasks are mixed, they may be nonetheless discouraging when one considers how central insurance policies and similar documents are in many people's lives.

Performance on More Difficult Passages

The following passage illustrates reading material that is apparently difficult for American adults.

Read the passage and answer the questions which follow it.

In the years between 1940 and 1960, literature, the arts, and culture in general became increasingly oriented to the many. In an economy of high productivity, deluging millions of people daily with movies, magazines, books, and television programs, American culture achieved a degree of homogeneity never dreamed of before. However, if such cultural homogeneity spelled loss of individuality--which it undoubtedly did- and if mass culture was often produced primarily for profit and only secondarily for esthetic reasons, nevertheless mass production of "art" made available to millions of people what in previous times had been the privilege only of the aristocratic few. Good radio and phonograph music was available where there had been no music before; there were more symphony orchestras and chamber music groups than ever; and in recent years more Americans purchased tickets to classical concerts than to baseball games. Paintings and items of sculpture were being turned out en masse in moderately good reproductions. The world's literature was being distributed in inexpensive paperback editions in every bookshop, drugstore, and transportation terminal. On balance it seemed that mass production, while it might not raise mass culture, would not destroy the growth of genuine taste either.

		1977 Percent Responding	Change From 1971
A.	The passage implies that before 1940, the arts were		
○	homogeneous.	10	0
○	generally enjoyed.	8	2
●	oriented to an elite.	51	-1
○	oriented to the average man.	10	-0
○	oriented to the level of mass culture.	14	0
○	I don't know.	7	-0
	No response	0	-1*
B.	What was "the privilege only of the aristocratic few" as described in the passage?		
○	High profits	6	0
●	Great works of art	61	-0
○	Good radio and phonograph music	14	-2
○	Inexpensive reproductions of art works	11	2
○	I don't know.	7	1
	No response	0+	-1*

		1977 Percent Responding	Change From 1971
C.	What does the author seem to think of the mass production of art?		
●	It does not harm genuine art.	44	0
○	It is destructive to genuine art.	7	1
○	It lowers the level of mass culture.	6	1
○	It raises the level of mass culture.	26	-2
○	It is produced primarily for esthetic reasons.	7	-1
○	I don't know.	10	1
	No response	1†	-1

*Statistically significant.
†*Figures do not total 100% because of rounding.*

Fewer than one in four (24%) were able to answer all three questions correctly. Only 15% of those who watched more than three hours of television per day could do so.

Only half the adults chose the correct answer to the question that follows this poem.

My body a rounded stone
with a pattern of smooth seams,
My head a short snake,
retractive, protective.
My legs come out of their sleeves
or shrink within,
and so does my chin.
My eyelids are quick clamps.

My back is my roof.
I am always at home.
I travel where my house walks.
It is a smooth stone.
It floats within the lake,
or rests in the dust.
My flesh lives tenderly
inside its home.

	1977 Percent Responding	Change From 1971
What is one method the poet uses to attract the reader's interest?		
○ The dramatic outcome	3	-0
● An unusual point of view	52	-0
○ Scientific detail about nature	16	-0
○ The use of regular rhymes and rhythms	8	-0
○ The relationship between the characters	14	1
○ I don't know.	7	1
No response	0	-1*

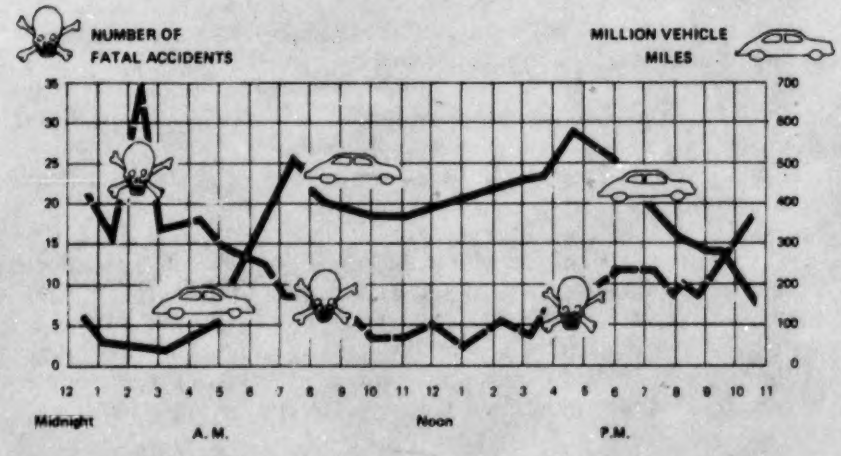
Statistically significant.

The fact that so many people did not know the answer, thought there were two characters in the poem or thought the poem is scientific might indicate that many people are alienated from complex statements like poems.

The following chart that shows the number of fatal accidents in California and the time of day during which most occurred also seemed difficult for the adults.

Read the passage and look at the chart, then answer the question below it.

This chart shows the number of fatal accidents (broken line) and the number of vehicle miles (solid line) in California, arranged according to the hour of the day.



	1977 Percent Responding	Change From 1971
All but one of the following factual conclusions can be reached from the data presented. Which statement goes beyond the data given in the chart?		
○ Fewer fatal accidents occur during the day than at night.	8	2
○ Driving at a time when most people would be sleepy is dangerous.	7	-2
● Eating a good lunch tends to keep drivers alert to driving hazards.	44	1
○ Traffic becomes heavier at the end of the working day than at the beginning.	7	0
○ Just because there are few vehicles on the road is no reason to relax one's safety precautions.	26	-5*
○ I don't know.	8	4*
No response	0	-1*

Statistically significant.

There was a 4-point increase in the number who said "I don't know." The overall level of correct responses remained at about 44%.

The passage on budgetism below includes two accompanying questions calling for inference on the part of the reader; correct responses to both questions were down.

Suburbanites are not irresponsible. Indeed, what is striking about the young couples' march along the abyss is the earnestness and precision with which they go about it. They are extremely budget-conscious. They can rattle off most of their monthly payments down to the last penny; one might say that even their impulse buying is deliberately planned. They are conscientious in meeting obligations, and rarely do they fall delinquent in their accounts.

They are exponents of what could be called budgetism. This does not mean that they actually keep formal budgets–quite the contrary. The beauty of budgetism is that one doesn't have to keep a budget at all. It's done automatically. In the new middle-class rhythm of life, obligations are homogenized, for the overriding aim is to have oneself precommitted to regular, unvarying monthly payments on all the major items.

Americans used to be divided into three sizable groups: those who thought of money obligations in terms of the week, of the month, and of the year. Many people remain at both ends of the scale, but with the widening of the middle class, the mortgage payments are firmly geared to a thirty-day cycle, and any dissonant peaks and valleys are anathema. Just as young couples are now paying winter fuel bills in equal monthly fractions through the year, so they seek to spread out all the other heavy seasonal obligations they can anticipate. If vendors will not oblige by accepting equal monthly installments, the purchasers will smooth out the load themselves by floating loans.

It is, suburbanites cheerfully explain, a matter of psychology. They don't trust themselves. In self-entrapment is security. They try to budget so tightly that there are no unappropriated funds, for they know these would burn a hole in their pocket. Not merely out of greed for goods, then, do they commit themselves; it is protection they want, too. And though it would be extreme to say that they go into debt to be secure, carefully charted debt does give them a certain peace of mind--and in suburbia this is more coveted than luxury itself.

	1977 Percent Responding	Change From 1971
A. Which of the following BEST explains the kind of human behavior described?		
○ "Not merely ... greed for goods."	3	1
● "In self-entrapment is security ..."	29	-2
○ "... obligations are homogenized ..."	8	-1
○ "Suburbanites are not irresponsible."	16	-1
○ "They are extremely budget-conscious."	37	2
○ I don't know.	6	2
No response	1	-0
B. How could "budgetism" BEST be defined?		
○ Buying everything on the installment plan	8	2
○ Keeping careful records of income and outgo	18	-1
○ Deciding in advance how much will be spent each year	8	2
○ Setting aside a certain amount each month for regular expenses	24	2
● Committing almost the entire monthly income to regular payments	37	-6
○ I don't know.	4	1
No response	1	-0

Twenty-nine percent correctly answered the first question and 37% correctly answered the second. The drop of 6 points on part B is close to statistically significant. Overall, only 18% answered both questions correctly.

In this paper, a handful of results from an adult reading probe have been presented; the probe is not, in itself, a comprehensive test of abilities. National Assessment cannot make very broad generalizations from this information alone. However, the reader can infer from it that today's adult readers have not improved noticeably over the adults who participated in the more comprehensive 1971 assessment. A third to a half of them continue to have difficulty comprehending reading materials that call for higher-level reading skills.

More adult assessments are needed to substantiate this claim and to pinpoint the most troublesome areas. For the meantime, however, it is safe to conclude that if America's school children need more work in the "basics," her adults do, too.

BIBLIOGRAPHY

Mellon, John C. National Assessment and the Teaching of English. Urbana, Ill.: National Council of Teachers of English, 1975. Educational Resources Information Center (ERIC) no. ED 112 427.

Reading: Released Exercises, Report 02-R-20, 1970-71 Assessment. Denver, Colo.: National Assessment of Educational Progress, Education Commission of the States, 1973. ERIC no. ED 079 684.